

APRIL 26<sup>th</sup> vol·xiv 1895 No·28.

## Priest's Dining Room,

102 Dartmouth Street. Boston.

21 Meals (full ticket), \$4.00. 14 Meals, Breakfast and Dinner, \$3.00. 7 Meals, Breakfast, \$1.50. 7 Meals, Lunch, \$1.40. 7 Meals, Dinner, \$1.75.

Hours for Meals.—Week Days: Breakfast 6 to 10; Lunch, 12 to 2.30; Dinner, 5 to 8. Sundays: Breakfast, 8 to 10.30; Dinner, 12.30 to 3.30; Lunch, 5.30 to 7.30.

C. M. PRIEST, Proprietor.

#### THE HOTEL HUNTINGTON,

COPLEY SOLARE AND HUNTINGTON AVENUE



Offers large and pleasant outside rooms, from \$7.00 per week upward.

Dining rooms conducted on European plan.

An elegant Gentlemen's Café has recently been added

C. A. JONES & CO.,

#### STUDENTS' SUPPLIES.

Blank Books, Note Books, Drawing Papers, Pens, Inks of all kinds, Fountain Pens.

#### PERIODICALS AND MAGAZINES.

Writing Paper and Envelopes with TECH Monogram and Imprint Paper by the pound, at

#### SOUTHWELL'S,

Corner Dartmouth Street and Columbus Avenue, and 439 Boylston Street.

2d door from Berkeley Street.

## OAK GROVE CREAMERY CO., DAIRY LUNCH ROOM,

445 BOYLSTON STREET, CORNER BERKELEY,

Where can be had Sandwiches of all kinds, Soups, Tea, Coffee, and regular Dairy Lunch.

Pure Fresh-churned Butter, in Quarter-pound Prints, Five and Ten Pound Boxes, Pure, Fresh Milk and Cream, delivered in Glass Jars. Fresh-laid Eggs.
Pure, Full Cream Cheese, American (plain), Sage, Neuf-chatel and Edam. All kinds of Fruit Ices.

NELSON L. MARTIN.

## T. E. Woseley & Co.,

-SHOES-

The largest assortment in Boston, in Black, Tan and Patent Leather, at Popular Prices.

Our \$4.00 and \$5.00 goods are superior in style and quality to those usually sold at such low prices.

DISCOUNT TO TECHNOLOGY.

469 Washington Street.



### J. C. LITTLEFIELD,

## Tailor • and • Outfitter, 21, 23 BEACON STREET, BOSTON.

I can offer you a larger and more complete assortment than can be seen elsewhere, and at lower prices for the same qualities. Look in and examine my \$30 Cheviot and Tweed Suitings.

GOLF BREECHES, RIDING BREECHES, AND DRESS SUITS A SPECIALTY.

DISCOUNT TO STUDENTS.

Banjo, Mandolin and Guitar.



## G. L. LANSING,

Teacher, and Director of Clubs, 171-A WINTER STREET, BOSTON.

BEST INSTRUMENTS CONSTANTLY IN STOCK. MUSIC, STRINGS, ETC.

Drawing Boards, Papers,

Inks. Pens, Instruments, and Fountain Pens

At Discounted Rates.

#### A. D. MACLACHLAN,

Tech Co-operative Store,

214 Clarendon St., - - Boston, Mass.

#### Bookbinding

IN EVERY STYLE.

ALEX. MOORE, 3 School Street, BOSTON.

#### C. E. RICHARDSON,

#### AGENT FOR DARTMOUTH LAUNDRY,

Coolidge & Caswell, Prop'rs, 141 Dartmouth St., Boston.

Orders by mail receive prompt attention.

Goods called for and delivered without extra charge.

#### WALTER C. BROOKS & CO.,

TAILORS

— то—

M. I. T. CO-OPERATIVE SOCIETY.

15 MILK STREET, BOSTON, MASS.

BIRTHPLACE OF FRANKLIN.

## DAME, STODDARD & KENDALL, CYMNASIUM OUTFITTERS.

SUITS A SPECIALTY.

SHOES, TIGHTS, SHIRTS, STRAPS, ETC.

Special discount to Tech men on these goods.

NO. 374 WASHINGTON AND NO. 2 FRANKLIN STREETS.

#### STANDARD CLOTHING CO.,

MANUFACTURING RETAILERS OF

## HIGH GRADE CLOTHING

From both Foreign and Domestic Fabrics.

ALSO ADVANCE STYLES IN TROUSERS, SUITS, NO OVERCOATS. Full Dress Suits Constantly on Hand.

395 WASHINGTON ST.,

BOSTON, MASS.

DR. E. L. JORDAN, **DENTIST.** 

23 TREMONT STREET . . . . BOSTON.

Opposite Boston Museum.

The only place in Boston where Teeth can be excavated for filling WITHOUT PAIN.

Gentlemen! I wish to call your attention to the fact that I am paying the highest Cash Prices for Cast-off Clothing. Also Cleaning and Repairing done at short notice Send postal to . . . . .

105 Lamartine Street, Jamaica Plain, Boston.
I can be found outside the Technology Buildings on Boylston St. daily

T'HE

## Union Gymnasium.

48 BOYLSTON STREET,

(Near Tremont St.)

SPACIOUS. PRACTICAL. POPULAR.

Complete Modern Apparatus.

Marble and Concrete Bath Rooms, with Shower, Sponge, Needle, Douche, and other baths.

Dressing Rooms. Extra Large Lockers. POPULAR CLASSES.

Competent Instructors in attendance Day and Evening.

No Extra Charge for instruction.

Terms: \$5 and \$8 per year, according to hours of Exercise.

#### BOSTON YOUNG MEN'S CHRISTIAN UNION.

WM. H. BALDWIN, Pres.

GEORGE PEIRCE, Sec'y.



#### EYES.

CHAS. W. HURLL, JR.,

Practical Optician.

C.W.HURLL, JR. 409 WASHINGTON ST. BOSTON.

SPECTACLES, EYE GLASSES, OPERA GLASSES, THERMOMETERS.

tions filled.

THERMOMETERS,

Oculists' Prescrip-

Ten per cent discount to M. I. T. Students.

409 WASHINGTON STREET, ONE FLIGHT.

Between Winter and Bromfield Sts.

#### FOBES' SHORTHAND SIMPLIFIED.

WRITES LIKE LONGHAND.

EASY TO LEARN, EASY TO WRITE, EASY TO READ.

Lessons by mail. For particulars address WALTER K. FOBES, 65 Walden Street, N. Cambridge, or Box 2665, Boston, Mass.

## HASTINGS...

PHOTOGRAPHER
To the Class of '95, M. I. T.

Pastels, Crayons, Water Colors.

No. 146 Tremont Street, over Huyler's.

Branch ... No. 1068 Boylston Street, Corner Massachusetts Avenue.

SILVER MEDAL, Boston, 1881. Gold Medal, Boston, 1887. Grand Prize, P. A. of A., Washington, 1890. Bronze Medal, Washington, 1890. Gold Medal, Boston, 1892. Silver Medal, Chicago, 1893. Aristo Award, St. Louis, 1894. Gold Badge, Cramer Award, St. Louis, 1894. Special Diploma, Illustrative Class, St. Louis, 1894.

#### RESTAURANT MARLIAVE,

11 Bosworth Street.



Liblished 1870.

Awarded Gold Medal at the Fifteenth Annual Exhibition of the Massachusetts Charitable Mechanic Association.

HENRY D. CASEY, 198 DARTMOUTH STREET, BOSTON, near Copley Square.

#### Manufacturer and Gilder of Gold and Bronze Landscape and Portrait Frames

In Antique and Modern Designs. Old Frames and Furniture Repaired and Regilt.

Artists and Art Patrons will realize a great saving by dealing directly with the Manufacturers. Models and Patterns of Frame Architecture can be seen at Studio. Oil Paintings Cleaned and Restored.

## CONTINENTAL CLOTHING HOUSE, MEN'S, BOYS', AND CHILDREN'S CLOTHING,

GENTS' FURNISHINGS, HATS AND CAPS.

Fine custom work made from measure. Uniforms of every description. Special attention given to Technology and English High School Uniforms. Workmanship the best. Prices the lowest.

#### CONTINENTAL CLOTHING HOUSE,

Corner Washington and Boylston Streets, Boston, Mass.



#### WRIGHT & DITSON, FINE ATHLETIC SUPPLIES.

WRIGHT & DITSON'S LAWN TENNIS SUPPLIES ARE ACKNOWLEDGED LEADERS AND THE FINEST MANUFACTURED.

#### BASEBALL.

Every requisite for the Game; Uniforms a specialty. Golf Supplies and all requisites for Outdoor and Indoor Sport.

Handsome Catalogue Free,

344 Washington Street, Boston,

## CLOTHING ULEANSED

Last season's suit or overcoat, carefully cleansed and pressed, would look nearly as well as new.

Woolen clothing DYES to look extremely well.



## All work ironed by hand.

CALL FOR AND DELIVER BUNDLES.

## LEWANDO'S

17 TEMPLE PLACE, - 284 BOYLSTON STREET,

Telephone 1393, BOSTON.

239-2, TREMONT.

Lewando's Laundry is the Best.

**(1)** 

The Standard for All.

### Columbia Bicycles

Highest Quality of All.

Have you feasted your eyes upon the beauty and grace of the 1895 Columbias? Have you tested and compared them with all others? Only by such testing can you know how fully the Columbia justifies its proud title of the "Standard for the World." Any model or equipment your taste may require, \$100



**\*** 

POPE MFG. CO.
HARTFORD, Conn.

Boston, New York, Chicago, San Francisco, Providence, Buffalo.

An Art Catalogue of these famous wheels and of Hartfords, \$80,\$60, free at Columbia agencies, or mailed for two 2-cent stamps.

## White Bros.

#### Merchant Tailors

Have opened a New Store at

#### 306-A COLUMBUS AVE.

Suits that were \$30 now \$18; suits that were \$25 now \$15; pants that were \$9 now \$5; pants that were \$7 now \$4; spring overcoats that were \$35 now \$25; spring overcoats that were \$30 now \$18. Foreign and domestic woolens at reduced prices for a short while. All work made strictly to measure in a first-class manner and guaranteed to fit. Our stock is all new and stylish goods.

DEMAND POND'S EXTRACT. AVOID



FAC-SIMILE OF BOTTLE WITH BUFF WRAPPER.

Feminine
Complaints
Lameness
Soreness
Wounds
Bruises
Catarrh
Burns
Piles

FOR

# USE Burns Piles POND'S EXTRACT

#### L. P. HOLLANDER & CO., FINE READY-MADE CLOTHING

Everything shown in our stock is exclusively of our own make, cut from patterns corrected to the latest tashions, and made from the best of materials. We respectfully solicit a comparison of prices and an examination of our styles, also

FURNISHING GOODS AND HATS.

202 to 212 Boylston Street.

## Frank Wood,

Printer,

352 Washington Street, Boston.

#### CLASS-DAY INVITATIONS,

BLANK BOOKS, FOUNTAIN PENS,

CAN BE FOUND AT THE CO-OPERATIVE STORE,

H. H. Carter & Co., No. 3 Beacon St., Boston.

#### PAINLESS DENTISTRY

BY THE USE OF DORSENIA.

DR. YOUNG, Surgeon-Dentist,

415 BOYLSTON STREET.

Special attention to TECH boys.

## EXETER LUNCH ROOM.

QUICK SERVICE!

BEST SANDWICH IN BOSTON.

A. ALGAR, 35-A EXETER STREET.

## NEW \* MAIL

HIGHEST GRADE LIGHT ROADSTER.

Price for 1895, **\$85.** 



there is the state of the state
MEN'S AND LADIES' pattern \$85
YOUTH'S NEW MAIL, a high grade Boy's
Wheel
Also TEMPLAR, best medium grade Man's
Wheel
ATALANTA, Ladies' Pattern \$60
Other makes, Boys' Wheels \$15 up
A few Shopworn and Secondhand Wheels taken in
trade at very low prices. Bargains.  Catalogue and Secondhand list.

## • WILLIAM READ & SONS • 107 WASHINGTON STREET, BOSTON.

## COLLINS & FAIRBANKS -CELEBRATED - HATS! -



#### STYLES SPECIALLY ADAPTED TO YOUNG MEN

Mackintoshes, Umbrellas, Canes and Gloves. Sole Agents for Henry Heath's and A. J. White's London Hats.

#### 381 WASHINGTON STREET, BOSTON.

## SPECIAL TO TECH MEN.



Riding, hunting, and knickerbocker breeches, leggins and gaiters, spats, and park riding trousers.

Golf suits with caps and capes.

Best genuine Scotch "Harris" hand-spun golf and knickerbocker stockings in all sizes; clan and fancy designs.

All garments cut in strict English style.

#### Messenger & Jones,

YOUNG MEN'S TAILORS.

388 Washington Street, Boston.

STUDENT WORK IN ALL ITS BRANCHES A SPECIALTY

M. I. T. Co-operative.

## THE TECH

VOL. XIV.

BOSTON, APRIL 25, 1895.

No. 28.

#### Тне Тесн

Published every Thursday, during the college year, by students of the Massachusetts Institute of Technology.

CHARLES GILMAN HYDE, '96, Editor in Chief.
EDWARD ARTHUR BALDWIN,'96, Assistant Ed. in Chief.
BENJAMIN HURD, JR., '96.
SHELDON LEAVITT HOWARD, '97.
WILLIAM THORNTON PARKER, '97.
RALPH SPELMAN WHITING, '97
THOMAS EDDY TALLMADGE, '98.
RAYMOND SMITH WILLIS, '98.

SHELDON LEAVITT HOWARD, '97, Secretary.

H. P. CODDINGTON, '95, Business Manager. W. R. STRICKLAND, '98, Ass't Business Manager.

Subscription, \$2.50 per year, in advance. Single copies, 10 cts. each.

For the benefit of students THE TECH will be pleased to answer all questions and obtain all possible information pertaining to any department of the College.

Contributions are requested from all undergraduates, alumni, and officers of instruction. No anonymous manuscript can be accepted.

Entered in Post Office, Boston, Mass., as Second Class Matter.



ECHNOLOGY Junior Week, with its list of events carefully planned and successfully carried through, is now well over, our friends have departed, and our college life has once again reverted to its ordinary routine of solid work in preparation for the Annuals. Never before has the number of en-

terprises been so large, nor has such general interest and co-operation been extended before by Faculty and by students alike. scarcely an exception each occasion was successful to a degree almost unexpected, and each played well its part among the pleasant features of the week. Too much cannot be said in commendation of the work of those committees and individuals whose efforts were so thoroughly identified with the happy outcome of the period. Few have realized the immense amount of time and of devoted enthusiasm which have been necessary on the part of members of the several organizations in preparation for their respective undertakings.

To those who so kindly served as patronesses and as matrons at the Plays, the Prom., and the Editors' Reception, the heartiest thanks and appreciation are extended. In very large measure the successful outcome of these affairs was due to their direct interest and substantial aid.

The Deutscher Verein was the first to appear before the Technology world of gaiety, in its play, "Er ist nicht eifersüchtig," its Zwischenspiel, and the prelude to Nessler's opera, "Der Trompeter von Säckingen." The play itself, while showing a deal of careful work and bringing out a decided talent on the part of Mr. Kramer, perhaps failed to rouse the enthusiasm which was called forth by the second portion of the programme. The Zwischenspiel, by the Ninety-Six quartette, was certainly entertaining. The opera, a bold undertaking, was well carried through under the direction of Mr. Roeder.

Mrs. Walker's reception to promenade guests on Tuesday afternoon was a highly pleasant affair, and added vastly to the enjoyment at the Junior Prom. in Pierce Hall in the In the response to the call of its evening. committee, Ninety-Six evinced a miserable spirit of apathy, and allowed the greater dependence to be placed upon the other classes. From a social standpoint, however, the affair proved to be all that could be desired. hall was comfortably filled with representative Technology men and their friends, the catering was excellent, the music unsurpassed; in fact, the occasion was one of which Ninety-Six might well have been proud had sufficient support been rendered to warrant the name of Junior Promenade.

On Wednesday afternoon The Tech office was the scene of a merry gathering, entertained by the Editors as hosts. During the afternoon the final grant of the State appropriation to Technology was announced, and was the cause for sincere congratulation. At the same time it was learned that the Faculty, in official acknowledgment of the period, had granted an extra recess of Saturday. The holiday was of no small value in that it granted an opportunity for a large number of men to make short trips to their homes, and especially in that it gave a delightful resting period to those who had participated in the several productions of the week.

The Annual Spring Concert, in Huntington Hall on Wednesday evening, was excellent in many ways, although, owing to a series of unfortunate circumstances, the singing of the Glee Club was far below its usual standard. The instrumental work, however, could only with difficulty be improved.

The French plays were, indeed, a suitable finale to the Week of the Juniors. Not only was a decided ability in acting displayed, but the stage management was exceptionally good, and the work of the ballet far beyond the general expectation.

The Photographic Exhibit, while small, was interesting from a technical point of view. Another year, however, a vast improvement might readily be made along a number of lines, and the exhibit might become a much more prominent feature of the Week. It is unfortunate that no bona fide Architectural exhibit could be opened. The Society would do well next year to make strenuous exertions to prepare an exhibition which would show the variety of work undertaken by the Department.

Thus Junior Week passed, with an encouraging enlargement upon the undertakings so well begun by Ninety-five. In its mistakes, it has taught what to avoid; in its multitude of successes, it has commended itself well to future years.



N Wednesday morning, April seventeenth, Governor Greenhalge signed the bill which will grant to Technology twentyfive thousand dollars a year for a period of six years. The bill passed the Legislature some weeks since, and has

only awaited the Governor's signature to become a law. Now that the final step has been taken, the Institute stands enriched by state appropriation, and is in a condition to carry to still further success its grand work, with relief, only temporary, perhaps, from a harassing lack of necessary funds.

Hearty appreciation is due the Legislature and the Governor from every student, graduate, and well-wisher of Technology. To President Walker especially belongs deepest gratitude and admiration for his untiring efforts before the Legislature in behalf of our college. In his report of several weeks ago, it is stated that, at the present time, sixty per cent of the students enrolled are from Massachusetts, and an appeal was made to the people of the State that the institution should not be allowed to become crippled in its work of educating the multitude.

The report also advances as the causes which led to the appeal to the state: "Two large buildings have been erected within the last five years at a cost of one hundred and sixty-four thousand dollars, in addition to an expenditure of three hundred and sixty-five thousand dollars for the land on which these buildings stand. The average deficit for the last two years has been twenty-three thousand dollars, notwithstanding the most rigid economy, and the burden has become too heavy to be borne alone." Although the tuition fee is two hundred dollars a year, the actual cost to the Institute of each student is three hundred annually, and with almost no income it is

obviously impossible to carry on the training.

The bill as proposed to the Legislature requested "twenty-five thousand dollars a year for six years"; a request which has been granted with but a single amendment, providing for the appropriation of an additional two thousand dollars a year for a scholarship fund.

Truly, every Technology man should rejoice that the work of our friends has ended in forcing action on the part of the Legislature, and that the burden which in the past several years has been well-nigh crushing, has been for time happily removed.

HE brilliant work of Mr. S. H. Woodbridge of Technology in securing the passage of the first real Anti-Lottery law by the last Congress, is illustrative of a good deal of quiet public-spirited work which has

its origin in this educational institution. The single-handed grapple with the giant monopoly which once owned the State of Louisiana, and lately found itself fighting desperately for its life, is indeed worthy of all praise, especially since it has been purely a labor of love, requiring the greatest delicacy and patience in legislative manipulation. Yet so skillfully was it done that this law stands as almost the only useful one passed by the last Congress.

In reality a considerable amount of unostentatious charitable and public-spirited work is now directed from Technology. President Walker has for many years devoted his time to the office of Trustee of the Art Museum. He has long been a member of the Park Commission of the City of Boston, and is now one of the great Commission which is undertaking the study of the question of Inebriety in the United States. Professor Dewey is Chairman of the State Commission to investi-

gate the subject of the Unemployed. Professor Porter has carried out perhaps the most extensive study of the Tenement House Question ever made in this country previous to 1890, the results of which were offered to the public by the Anti-Tenement House League of Boston in a voluminous report some years ago. The New England Kitchen, which now provides five-cent lunches for hundreds of our public school children, is managed by Mrs. Richards of the Institute, who is assisted by three Technology students. The eutire chemical work of the State Board of Health is under the direction of Dr. Drown. We are also well represented among the present public officials of the city. Professor Swain is a member of the Metropolitan Subway Commission, and has been expert engineer of the Massachusetts Railroad Commission for many years. The Chief Engineer of the Metropolitan Sewage Commission, as well as of the Subway and Rapid Transit Commissions, Mr. Carson, is an alumnus. recently the office of Superintendent of Streets of Boston was filled by Mr. Carter, of the Class of '77, and that of Engineer of the Harbor Commissioners by another alumnus. To-day the chief engineers of the West End System and the Boston & Albany represent our graduates in a semi-public capacity.

In view of this most encouraging statement of the breadth of the influence and the thoroughness of the training of our college, we may well say in the words of "Technique," "There is, indeed, in the work of the entire graduate body much of which to be proud, but little to censure. A love of Alma Mater has found its way into the heart of every true alumnus. His work has neither been selfish nor ineffectual. Well may the student of today emulate the example of those who have gone before; well may he give of his support, his sympathy, and his love to the college which has already accomplished so much in the world, which is destined to accomplish so much more."

OWING to a misunderstanding on the part of the printer and binder, the last issue of The Tech was not received until late on Thursday afternoon of Junior Week. A large number of copies was sent over to the French Plays at Copley Hall, but failed to be generally distributed, or, indeed, to reach regular subscribers.

HE Board of Editors of The Tech is greatly indebted to Mr. Charles Ewing, '97, for the artistic design which appears on the cover of the current issue.

#### At the French Plays.

With counterfeited glee she laughed (When others laughed) at every jest.

And then behind her gloved hand,
For French she did not understand,
She yawned, and thus her thoughts expressed.

But suddenly with true delight
She smiles, and claps her little hands.
This time no counterfeited glee,
But pleasure true I plain can see;
The Ballet! That she understands.

T. E. T.

#### An Answer.

Dear Dorothy, at thy request My monogram, with seal, and crest, I send thee now.

Oh joy! would'st thou but honor me And choose my signet thine to be— What bliss! eternal loyalty Too thee I'd vow.

But, Dorothy, too well I know From seeds thus sown no fruit will grow For me, poor man.

Too well I know that when we dance Again, I'll see my crest and lance With hosts of others, if I glance Upon thy fan.

s. L. H.

#### HER THANKS.

She thanked them all for everything,
From Christmas card to diamond ring;
And as her gifts she gaily flaunted,
She told her friends, "Just what I wanted."
But I, who had no cash to blow,
Just kissed her 'neath the mistletoe.
She blushed a bit, yet, never daunted,
Repeated low, "Just what I wanted."

-Harvard Lampoon.

#### The German Plays by Der Deutscher Verein.



ECHNOLOGY Junior Week has never before this year, it is safe to say, been celebrated with such widespread interest. In the French plays last year L'Avenir

made a distinct departure from the course of gaieties which had been formerly in vogue during the spring term, and effectively demonstrated that amateur theatricals would meet with a gratifying response from Technology 'as a whole. The Deutscher Verein, whose establishment succeeded that of the French society, had no time to prepare any representation during '94, and much interest was consequently aroused in anticipation of what would this year be accomplished after a twelvemonth of existence, and with the experiment of L'Avenir to afford them encouragement and guidance. It was therefore an expectant audience which comfortably filled Copley Hall on Monday evening of Junior Week, when were presented a one-act comedy by Elz and the prelude to Nessler's "Trompeter."

The comedy, "Er ist nicht eifersüchtig," deals with the perplexities of Cäcilie, who seeks to prove the love of her husband by forcing him into a display of jealousy, by a scheme in which she enlists the aid of her uncle Baumann. The hit of this piece was unquestionably made by Mr. Kramer, '96, who in make-up, manner, and "business," cleverly portrayed the old uncle—a simple, kindly, and altogether traditional character, about whom the action of the piece revolves. Mr. von Holst's acting of the recreant husband was also well done, and he proved particularly good in the more trying parts of his Mr. Blodgett won well-merited applause by his assumption of the difficult rôle of Cäcilie, while Mr. Lonngren gave a conscientious impersonation of the old servant, Hermann.

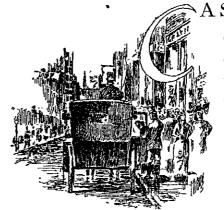
Following the comedy came, as the programme had it, a "Zwischenspiel," carried out by Messrs. Barker, Young, Leighton, and Stearns. These four made a decided hit, both in the singing of their opening ditty and in their capital rendering of the familiar" Lauterbach," which they accompanied with a clever dance in sabots. This portion of the programme, though brief, met with unmistakable favor, and won an enthusiastic double encore.

The evening closed with a most ambitious effort on the part of the Verein, the presentation of the prelude to Nessler's "Trompeter von Säckingen," which was given with gratifying success. Considering the small stage, the opera was well mounted, the scenery, representing the courtyard of Heidelberg Castle, having been especially painted for the occasion by Fredericks, from drawings expressly prepared. The principal parts were taken by Messrs. Smyser, '96, Dodge, '98, and Wason, '95, who did effective work, rendering their selections with tunefulness and spirit. Mr. Smyser's singing was especially commendable, and his rendering of Werner's farewell song won an encore. chorus, consisting of the Glee Club, reinforced by a number of additional voices, had been trained by Mr. Martin Roeder, and they delivered their several numbers to good effect, the opening chorus meriting especial commendation.

The representations of the evening were under the immediate charge of Professor Vogel, who deserves much credit for the success which the Verein achieved. Much praise is also due to Mr. F. E. Matthes, '95, the president of the society, and to his associates on the executive board, who did effective work in preparation for the plays.

The Society was honored in having for patronesses the following ladies: Mrs. W. B. Rogers, Mrs. Chas. Fairchild, Mrs. A. M. Van Daell, Mrs. R. H. Richards, Mrs. F. A. Walker, Mrs. Benj. Calef, Mrs. W. T. Sedgwick, Mrs. Frank Vogel, Mrs. W. A. Field.

#### The Junior Promendae.



ASTING aside the sterner realities of a scientific education, a number of representative Technology men set about to enjoy to the full one of the more jovial undertakings of Junior Week—the Junior Prom-

enade at Pierce Hall, on Tuesday evening. Everything conspired to make the affair a true social success; Nature herself, so lately forbidding, assumed her pleasantest smile; the number present, although comparatively small, was well adapted to the size of the hall, and aided to a large extent in making the dances wholly enjoyable; the music, which was furnished by Daggett, could scarcely be improved; the supper was excellent; the hall appeared at its best; the frappé which was served throughout the evening was a pleasant innovation; in fact, no appointment which would add to the general satisfaction was allowed to go without atten-One thing alone tended to mar the entire success of the occasion. Ninety-six, as a class, did nothing to foster the work of its committee. Only fifteen men responded to its call, leaving the majority of names to be derived from Ninety-five and Ninety-seven. The response of these classes, though a generous one, was not sufficient to overcome the deficiency caused by the unfortunate insensibility of Ninety-six.

Shortly after eight the matrons, Mrs. Francis A. Walker, Mrs. Desmond Fitzgerald, Mrs. William Lincoln Smith, and Mrs. George F. Swain, arrived, and after a fascinating overture by the orchestra, the Prom. was soon in full swing. The appreciation of the committee and of the class is extended to these ladies, who served so kindly throughout the evening, and especially to Mrs. Walker, who insisted upon remaining until the very last. Mrs.

Walker's reception to the promenade guests at her home on Beacon Street in the afternoon proved the merriest of occasions, and aided very largely in reducing the formalities of the evening.

At nine o'clock the dancing numbers began, and in the succession of waltz and two-step a true enjoyment was found. During the intermission the supper was served in the hall, a pleasant depature over previous years. The Banjo Club rendered a number of selections in its usual happy manner, which was highly appreciated by everyone.

The supper over, the Banjo Club dispersed with its customary laurels, again the tuneful strain inviting to the dance was heard, and the second series was begun. Two o'clock, and with it the end of the Junior Promenade, arrived all too quickly. Soon the hall was deserted, the matrons had gone their several ways, the last carriage had been called, and the janitors alone were left—the only undertaking of Junior Week, and certainly one of the happiest, given wholly in the name of Ninety-six, was over—and it had been a perfect success.

The committee consisted of Messrs. Harry G. Fisk, Chairman, E. Arthur Baldwin, John L. Putnam, Conrad H. Young, and Charles G. Hyde.

Among the young ladies present were:—
Miss Alice Mayo, Springfield; Miss Maude Berry, Portsmouth; Miss Lillian Wright, Dorchester; Miss Mable Fales, Pondville; Miss Edith Foster, Dorchester; Miss Marion Davis, Boston; Miss Edith Hudson, Boston; Miss Marion Stone, Dorchester; Miss Drake, West Medford; Miss Ellen Hamilton, Albany; Miss Whiting, Pittsfield; Miss Mary Hyde, Norwich, Conn.; Miss Harriet Hyde, Norwich, Conn.; Miss Rockwell, Norwich, Conn.; Miss M. A. Tufts, Charlestown; Miss McAlpine, Lawrence; Miss Brown, Boston; Miss Laura Bigelow, Utica; Miss Kate B. Tyler, Waltham; Miss Frances H. Jordon, West Roxbury; Miss Hildreth Nesmith, Lowell; Miss Sarah Ames, Lowell; Miss Alice Daniels, Boston; Miss Hapgood, Everett; Miss F. G. Long, North Cambridge; Miss Knowles, West Somerville; Miss E. Van Evren, Somerville; Miss Grace Van Evren, Somerville; Miss Chaffee, Cambridge; Miss Mable L. Kittredge, Dorchester; Miss Aida Dunn, Dorchester; Miss Edith B. Perliam, Lowell; Miss Minerva B. Olin, Boston; Miss Alice Rogers, Lowell; Miss Minerva B. Olin, Boston; Miss Alice Rogers, Lowell; Miss Edith Melluish, Bloomington, Ill; Miss Lola M. Bush. Northampton; Miss Haskins, Boston; Mrs. L. M Haskins, Boston; Miss Hawkins, Lynn; Miss Paul, Somerville; Miss Baker, Adams; Miss Hammond, Boston; Miss Armstrong,

Allston; Miss McPherson, Somerville; Miss Carter, Dorchester; Miss Bryant, Boston; Miss Lillian Smith, Boston; Miss Florence Hyde, Roxbury; Miss Nelson, Newton Highlands; Miss Carrie Badger, Roxbury; Miss Grace Fobes, Newton Highlands; Miss Florence Fobes, Newton Highlands; Miss Edith Parry, Boston; Miss Sadie E. Smith, Albion; Miss Fairchild, Lasalle; Miss Stephenson, Lasalle; Miss Walker, Boston.

#### Reception of the Board of Editors.

"When a lady's in the case, You know all other things give place."

MONG the pleasant occasions of Junior Week was the initial reception tendered by the Editors of The Tech to their friends, on Wednesday afternoon, April 17th. Soon after four the office, resplendent with banners and trophies, well decorated with palms and hydrangeas, and

presenting an unexpectedly hospitable appearance, was thronged with merry guests.

The matrons, Mrs. William T. Sedgwick and Mrs. Thomas M. Drown, were assisted by Miss Rockwell and the Misses Hyde of Norwich, Miss Whiting of Pittsfield, and Miss Hurd of Brookline, who presided at the tables.

The Editors were especially glad to greet Mrs. Walker, and from the Faculty, Dr. Tyler, Dr. Sedgwick, Professor Bates and Captain Bigelow, who, by their presence, added much to the enjoyment of the occasion.

The reception was decidedly of an informal nature, and as none of the paraphernalia essential to the art of newspaper-making had been removed from the office, the Editors were able to initiate those of their fairer friends, who were interested, into the art of successful journalism. The opportune arrival of "Technique," also added not a little to the enjoyment of the afternoon, and the Professors and students present were in many instances the recipients of congratulations upon their prominence in Technology affairs as set forth in that meritorious volume.

The hours passed all too quickly for the hosts, and, as the reception drew to a close, they bethought themselves of the piano which had been placed in an adjoining room for use during the rehearsals of the Society L'Avenir; and after indulging in a few dances with the young ladies who had contributed so largely to the success of the event, an afternoon was ended which the Editors will long remember as one of the brightest of their college life.

#### The Annual Spring Concert.



HE annual spring concert of the Technology Glee, Banjo and Mandolin Clubs was held in Huntington Hall last Wednesday, and, as usual, was a great success. The stage was gaily decorated with bright streamers

and American flags, while numerous palms made the bare platform very attractive. The hall was well filled with an interested and appreciative audience, many of the Faculty being present.

The programme, which we print below, was remarkably well arranged and contained several novel features. The Banjo Club and Glee Club, of course, did the bulk of the work, the former rendering eight selections and the latter six.

To the Banjo Club and its able leader, Mr. Shepard, the success of the concert is undoubtedly due. We have always had a banjo club of which to be proud at Technology, and its work Wednesday evening was fully up to its past achievements. The time was perfect, and every man played with a snap that is seldom equaled. It was in the second part of the concert that the Banjo Club received an ovation. The "Wild Haste Galop" was rendered with dashing spirit and won tremendous applause. For its first encore the club played a

piece from "Princess Bonnie," which was also enthusiastically received; then the "Salvation Army" with its catchy refrain; and it was only after the "Tabasco March" had been played that the audience allowed the club to leave the stage. Such successes as these show hard and conscientious work, and the smoothness with which every piece was presented was noticeable to everyone.

The Mandolin Club was also highly successful, and deserves a great deal of credit. The mandolins, Clifford, Putnam and Barber, played together excellently, and the general work of the club showed good practice. For the first encore the club played a medley containing pretty, catchy tunes, which were thoroughly enjoyable.

The hit of the evening, however, was the duet of Mr. Barber and Mr. Shuman; the former playing the mandolin, the latter the guitar. Mr. Barber displayed remarkable skill in technique, and put a great deal of spirit and feeling into his work. Shuman accompanied him splendidly, and the pair received tumultuous applause. Two encores were rendered, and both were excellent.

#### PROGRAMME.

Part I.	
I. Comrades in Arms Roede GLEE CLUB.	r.
2 The Darkies' Parade Lansin BANJO CLUB.	g.
3. Oswa Waltz J. W. Shuman, 's Mandolin Club.	<b>)</b> 7
4 Creole Love Song Smith GLEE CLUB.	h.
5. Zither Duet	
6. Estudiantina Lacom GLEE AND BANJO CLUBS.	e.
Part II.	
1. Off to Philadelphia in the Morning GLEE CLUB.	
2. Wild Haste Galop Faus Banjo Club.	t.
3. Mandolin and Guitar Duet	
Messrs. Barber and Shuman.	
4. Solo	
5. Love's Dream	
6. M. I. T. Medley Lansin BANJO CLUB.	g

#### The French Plays.

FTER the tremendous initial success of last year, it was thought that L'Avenir would have the greatest difficulty in maintaining the high standard established at that time; the performance of last Thursday evening,

however, showed that such fears were unwarranted. Both in the quality of the French and the character of the acting, the plays were much superior to those given last year, and the ballet, although, possibly, less artistic in conception, was excellently trained.

The performance opened with a comedy by Ernest Legouvé and Eugène Labiche, "La Cigale chez les Fourmis." The plot was briefly as follows:—A rich bourgeois, his wife, and daughter discuss the projected marriage of the latter to a young nobleman, when a letter to the fiancé falls into their hands, from which they learn that they are obnoxious, on account of their ignorance of the art of spending money, and that, in fact, they are considered merely a colony of ants. At this point a young spend-thrift, Paul de Vineuil, entering to pay a bill, discloses in the course of conversation the fact that the young nobleman is his friend, and that he himself, after spending his private fortune, now makes it his profession to assist his friends in the expenditure of theirs. He is welcomed with open arms by the family of Chameroy, and proceeds to make arrangements for the furnishing of the room and for the costuming of the young lady. At the last moment a letter arrives breaking off the purposed marriage. Paul very unselfishly writes to his friend an urgent denunciation of this course, which, however, Miss Henriette tears in fragments. After Paul's departure she acknowledges that ne is the man whom she will marry; an avowal which he hears in returning for his umbrella which had been inadvertently left. The future developments, after the fall of the curtain, are obvious.

Mr. Nichols as M. Chameroy, a retired manufacturer, played his part well, with make-up and action very appropriate to the character. Mr. Smith as Henriette was especially good. His make-up was splendid; his gestures and movements were so entirely feminine that it was hard to believe the part was not taken by a woman. Mr. Winslow as Paul de Vineuil showed a great deal of ease in both speech and manner. His French was excellent. Mr. Mason as Mme. Chameroy, and Mr. Drake as the domestique, were enjoyable characters.

, The part of Robert in Le Thème Americain was by far the finest piece of acting of the evening. The actor was apparently perfectly at his ease, and none of his gestures seemed studied. The eccentric Lucie was excellently taken by Mr. Hill. His acting has improved wonderfully since last year, and as in the case of Mr. Smith, it was difficult to believe that the part was not taken by a woman. Fitzgerald acted the part of the confidential valet in a very skillful manner. The ballet was as usual the hit of the evening. Tobey was very amusing as the football. entrance was greeted with roars of laughter. The dancing of the Tech. trio, Messrs. Alden, Denison, and Thomas, was especially fine, and received a well-merited encore. Page and Mr. Jackson, as Harvard and Yale, both danced solos, which were well applauded. The fainting of the Harvard representative, and her removal on a stretcher by two red imps, caused a great deal of laughter. A vast deal of credit is due to Mr. C. H. L. N. Bernard and his brother, Mr. L. Bernard, who trained the actors to such perfection, and to the dancing master, Mr. J. J. Coleman, who, out of raw material, made a most successful and artistic ballet.

The society was fortunate in having as patronesses, Mrs. James M. Crafts, Mrs. Charles Fairchild, Mrs. Louise Chandler Moulton, Mrs. Parker, Mrs. William B. Rogers, Mrs. William E. Russell, Mrs.



Members of L'Augnir of the Massaghusetts Institute of Technology
who took part in the presentation of the french plays,
Copley Hall, April 18, 1895.



Members of the Deutscher Verein of the Massachusetts Institute of Technology

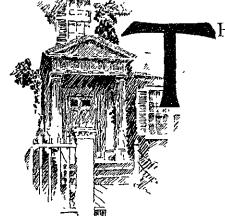
WHO TOOK PART IN THE PRESENTATION OF THE GERMAN PLAYS,

COPLEY HALL, APRIL 15, 1895.

Alphonse N. van Daell, Mrs. Francis A. Walker, and Mrs. Francis H. Williams.

The committee of management consisted of MM. C. H. L. N. Bernard, L. Bernard, Bourne, '95, W. E. Davis, '95, A. W. Drake, '95, C. F. Drake, '96, E. P. Schoentgen, '95, and M. J. Sturm, '96.

#### The Photographic Society Exhibit.



HE annual exhibition of the Photographic Society was held during Junior Week, in the basement of the Architectural Building. Though the number of pictures entered was some-

what smaller than that of last year, the quality of the work was certainly as satisfactory. The exhibition as usual contained examples of the various methods of printing, and many of the mounts were excellent in detail. The subjects were as a rule well chosen, and were in many cases of a highly interesting nature.

Among the photographs of landscapes, Mr. D. A. Richardson's exhibit of Alpine views and views of mountains in Germany and Switzerland was one of the best. Mr. Richardson also exhibited photographs of several examples of representative Parisian architecture, among them being one of the "Arc de Triomphe."

Mr. H. A. Poppenhusen exhibited some excellent pictures of the Mass. Nautical Training School's ship, Enterprise, and some very good views of portions of the Navy Yard at Charlestown.

Mr. W. H. Keith entered some very sharp flash-light pictures, together with clever snapshots of the South End fire of April, '94. Mr. Keith also showed a picture of a boiler test, which was a very good example of interior photography. Mr. Keith's pictures of machinery

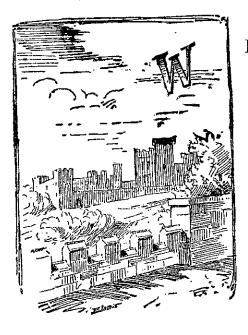
were, like Mr. Poppenhusen's, splendid illustrations of the adaptability of photography to engineering.

Mr. Herbert Watson and Mr. F. N. Conant exhibited some beautiful bromide prints, their subjects being particularly good.

There were also some excellent transparencies of river scenery and landscapes, which were remarkably distinct.

Scientific photography was also well represented by Mr. S. C. Keith. Mr. Keith showed a number of micro-photographs of monilia and yeast magnified seven hundred diameters, and his collection was well mounted and interesting. There were many photographs shown for which no credit can be given, inasmuch as but few of the exhibits bore the names of their owners. The prizes, which were not awarded during Junior Week, will be announced in the next issue of The Tech.

#### Boston Architectural Exhibition.



HILE the Department of Architecture was unable to arrange an exhibition of its own during Junior week, owing to the unusual pressure of work brought to bear upon it by the various competitions in which it

has recently taken part, it was fortunate in being able to hang many of its drawings in the joint exhibition of the Boston Society of Architects and the Boston Architectural Club held in Allston Hall.

Foremost among the large problems by the fifth-year men were those of Mr. F. M. Mann,—the design for a Theater for Cantatas and that for a Custom House, each of

which received the gold medal in the recent competitions of the Society of Beaux-Arts Architects of New York. Arranged with these were the two designs of Mr. W. B. Faville, each of which took first mention in the competitions in which F. M. Mann took the medal; also, Mr. H. H. Thorndike's firstmention design for a Theater of Cantatas. The fourth year was represented by two firstmention designs for a Schoolhouse, taken by Mr. F. A. Bourne and J. H. Parker in the junior Beaux-Arts competition. Mr. Ralph C. Henry entered an exceptionally wellrendered design for a Frontispiece, a problem in third-year design, and Mr. R. C. Spring a brilliant Greek Ionic Order, a specimen of second-year work.

Course IV. has never shown more creditable work, and it is with no little pride that Technology points to the success which the Department has attained. A large number of the Rotch Scholarship Designs were hung, as were several of the more interesting problems owned by the Institute. An interesting water color by Mr. C. Howard Walker, suggesting the improvement of Copley Square, and also a number of sketches by Mr. Ross Turner, together with a sketch by Shepley, Rutan & Coolidge, showing the design for the completion of the front of Trinity Church, were entered.

Harvard University and the Boston Architectural Atelier had small exhibits, and the Boston Architectural Club and Society of Architects were each well represented.

#### Summer Courses at Technology.



SUPPLEMENTARY series of courses of study will be given at the Institute during the months of June and July, 1895. These

of certain instructors, and will only be given when a minimum number of students have Bernard and Frank V Full particulars m cation to Dr. Ripley.

applied before a fixed date. The number and date will be determined by each instructor, to whom applications should be sent as soon as possible. A fee of twenty-five dollars for each course will be collected at the Bursar's office at the time chosen for closing the applications.

The holding of summer courses has been approved by the government of Technology. They have been undertaken primarily for the benefit of two classes of its students: For those who wish to prolong their stay in summer in order to gain more time for advanced work in their regular courses,—time especially desirable in the fourth year, when original investigations and the examination of professional problems form an important part of their occupations,—and also for those who, through illness or for other causes, have deficiences to make up.

At the end of the course examinations will be held on the following subjects, whose results will be accepted as equivalents to those of the regular examinations for students in regular standing or under conditions:—

Mechanical Drawing and Descriptive Geometry: H. K. Burrison, S.B.

Differential Calculus: J. J. Skinner, Ph.D. Plane Analytic Geometry: L. M. Passano, A.B.

Shades and Shadows: W. H. Lawrence, S.B.

Orders: R. S. Shedd.

Analytical Chemistry: H. P. Talbot, Ph.D. Organic Analysis: A. A. Noyes, Ph.D.

Bacteriology: S. C. Keith, Jr., S.B.

Mechanics, Light, Electricity: G. V. Wendell, S.B.

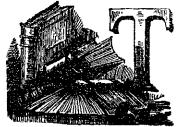
Heat: H. E. Clifford, S.B.

Physical Measurements: H. M. Goodwin, Ph.D.

There will also be given Courses in Elementary French and German by Messrs. L. Bernard and Frank Vogel, respectively.

Full particulars may be obtained on application to Dr. Ripley.

#### The Ninety-five "Portfolio."



HE Senior "Portfolio" this year promises to be one of the most interesting souvenirs which a graduate can carry away with him at the end of his college

course. We have had senior portfolios at Technology in previous years, but the volume this year bids fair to eclipse all former efforts.

The Class of '95 has shown much good sense, both in the selection of the "Portfolio" committee and in giving the men chosen full power in every way. This committee, composed of Mr. E. J. Loring, chairman, Azel Ames, F. B. Masters, D. N. Marble, and F. A. Park, has worked untiringly, and unhampered by the slowness of class action, has accomplished its share of the work most successfully.

The "Portfolio," when completed, will be composed of thirty plates, interleaved with printed matter, making a complete volume of about seventy pages. The book will be nine inches by twelve, and will be bound in flexible leather covers, the design of which has not yet been decided upon.

The photographs are Photo-Gelatin reproductions by the Albertype process, and are printed on heavy plate paper by the Forbes Lithograph Co.

The photographs of the forty-three members of the faculty will occupy the first four pages; then the candidates for advanced degrees, followed by twelve pages of the class members, arranged alphabetically in courses, beginning with Course I.

The reproductions will be two inches by one and three-eighths, and there will be usually three rows of six pictures each on every plate, making a total of faculty and class of about two hundred and fifty-seven.

There are five plates of Technology views, including a full-page view of Rogers building, the Walker, Engineering, and Architectural

buildings occupying a second plate. The remaining three plates contain well-selected views of the interior of various buildings, including the laboratories of Walker and Engineering.

The musical and dramatic organizations, the athletic teams, the Institute committee, and the class-day officers will be reproduced.

One of the most attractive features of the "Portfolio" will be the interleaves of printed matter. On these will be given the names of the men, together with much useful and interesting information regarding them. The prominence of a man in Institute affairs, his fraternity, his athletic successes, and the title of his thesis, will be given in each case.

The "Portfolio" will, in all probability, be brought out the middle of next month, and it is hoped that it will receive the hearty appreciation which it most assuredly deserves.

#### Walker Club.



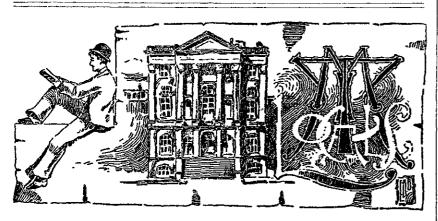
HE Walker Club, at its last regular meeting, April 5th, was very fortunate in obtaining as speaker Mr. Rutan, Secre-

tary of the Municipal League. Mr. Rutan's knowledge of city politics enabled him to supplement his remarks with specific instances of political manoeuvers and practice which had come under his own observation. He took for his subject "Municipal Politics."

Among other things, Mr. Rutan said: "Present good government movements are not spasms, but true indications of future progress." He spoke of the difficulty of obtaining worthy men for public offices, and illustrated his meaning by describing the movements of the "parley caucus." "Now that we have the secret ballot at party caucuses, these parley caucuses take the place of the discussions that we formerly had in party caucuses. A 'parley caucus' is a caucus held by the political leaders in a certain district

before the regular caucus. At this they decide whom they will nominate, and send their list to the regular party caucus. These parley caucuses are preceded by other smaller ones, until finally, if we follow the nominations up, we shall, perhaps, find that one or two men control the whole thing."

Mr. Rutan also spoke of the opportunities for young men who would go into politics, not for whatever office they might obtain, but for the reforms which they may be able to introduce. He also spoke of several measures which the Municipal League is attempting, and ended by saying that pessimism has no place in politics; that although in many respects the condition is miserable, doubtless many remedies will be suggested and enforced. After some informal discussion of the points brought out by Mr. Rutan, the club extended to him a unanimous vote of thanks.



Owing to the height of the Merrimac river the proposed trip to Lowell by men in the Sanitary Engineering course has been postponed.

One of the most fashionable audiences that ever assembled in Huntington Hall gathered to attend the Annual Spring Concert of the Musical Clubs.

The Boston Bridge Company has again sent a series of plates, which measure three quarters of an inch in thickness, for use in the testing laboratory.

Will the person who sent his initiation fee and dues to L'Avenir some two weeks since, without inclosing his name, kindly communicate with Mr. Earl P. Mason, Treasurer. Mr. Mark of the Lawrence Scientific School spent Wednesday afternoon in the engineering laboratories engaged in obtaining information for use in building up the shops at Harvard.

The Glee and Banjo Clubs gave a successful concert at Lowell on Friday of last week. It was followed by a reception and dance, which proved to be in every way enjoyable.

The regular lecture in the course on teaching was given last Saturday noon, in Room 11, by Dr. Theodore Hough, Instructor in Biology. His subject was, "The Teaching of Physiology."

The Mathematical Club held a meeting on April 18th, in which Mr. George read a very interesting paper on Calculus of Variation, after which time was given for the discussion of Dr. Wood's arrangement of Mathematical Courses.

Coupon books are now in possession of the promoters of athletics at Technology. Every man should contribute to the extent of his ability in the effort to carry on a successful training table and to develop a winning team for Worcester.

The Fairbanks Scale Company will replace the large steel lever recently broken on the 100,000 pound beam machine by another of steel 12 inches deep by 2 inches wide. This new lever will enable tests to be made considerably over 100,000 pounds.

All students intending to apply for State Scholarships are requested to leave their names, at once, at the Secretary's office. Such applications can be made only to the State Board of Education, and Institute endorsement is secured by the Board of Education, and not by the applicants themselves.

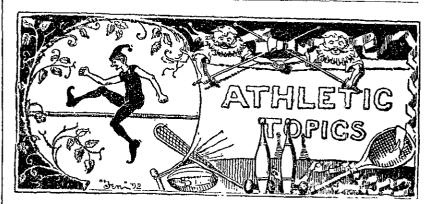
The two water colors loaned to the Deutscher Verein by Mr. Ward, '98, were taken from the Rogers' Corridor between the hours of 5.30 and 7 P. M., on Monday last. The persons identified with their removal will

kindly return the drawings immediately to The Tech Office and avoid further investigation.

One of the unfortunate incidents connected with the German Plays was the theft of the watches of Messrs. Schmitz and Anthony. They were taken while the men were on the stage, and there seems to be no clue as to who the thieves were. The police are doing everything in their power to recover the lost property.

The date for the Chestnut Hill engine tests has been definitely fixed for May 1st. test will be by far the largest that has ever been undertaken by the Institute, and will prove of no little value to the city of Boston, which in consequence will incur a considerable expense in preparation for the event. rangements have been made with the West End Company for special cars running back and forth from the Reservoir. The boiler test will be twenty-six hours in duration and the engine test twenty-four. The men will be divided into three squads and each will work eight or nine hours, so that constant observations can be made. Three men will be stationed at Fisher Hill, to measure water quantities by weirs; also two men stationed along the line at intervals from Chestnut to Fisher Hill, whose duty it will be to test the large supply pipes for pressure and obtain figures in friction. There will be twelve indicator men taking cards every fifteen minutes, and three men will be engaged in weighing condensed steam and jacket water. The flue gases will be analyzed by two men. coal itself will be carefully weighed and exact record of all temperatures will be made,—a work for which eight men have been detailed.

With such careful preparations this most elaborate and extensive test will have a successful issue. Professor Miller will meet the Seniors in Course II. in Huntington Hall, Wednesday, at twelve o'clock, where he will give full directions and explanations.



Bakenhus is trying the hurdles.

Stebbins will develop into a good distance runner.

Le Moyne has the build for an excellent weight thrower.

The management of the Track Team has chosen Kappe's Restaurant on Columbus Avenue, near Yarmouth Street, as the most suitable and reasonable place for the training table. All men intending to eat at the table during the spring training will please send their names to W. C. Marmon, "Cage."

In the open cross-country run of the Suffolk Athletic Club, S. F. Wise, M. I. T., '96, and R. R. Rumery, M. I. T., '98, finished seventh and ninth respectively from a field of some thirty-five or forty starters. The winner, E. W. Mills, was reported to be a student at Technology, but from the Secretary's books no such person is enrolled.

On Saturday last a special convention of the New England colleges in the N. E. I. A. A. was held at the Quincy House. The object of the meeting was to determine the date of the games at Worcester. After some discussion, Saturday, May 18th, was chosen.

Through Brown's able representative, a lawschool student, she again reconsidered the amendment to the constitution which had reference to debarring graduate students from the games until they had resided one year in the college. The motion was lost at the annual convention by a vote of five to four in favor, since a two-thirds vote would have been necessary to carry it.

It was a direct blow at Technology, and, although efforts were made to hold our own,

six colleges voted on Saturday in favor of the amendment, which was thus established.

The annual spring handicap games of the B. A. A. were contested on Irvington Oval last Friday, before about two thousand specta-A noticeable feature of the meet was the showing made by Technology. The 'Varsity T appeared in many of the final contests: Cummings, the team racer, with fifty yards handicap, won the 1000-yard run with comparative ease; F. W. Lord, captain of last year's track team, proved his superiority in the high hurdles; Abbott and Tillinghast finished together in the 600, Abbott getting third place; while Farquhar won second place in the running broad jump, with 21 feet 5 inches (actual) to his credit, thus establishing a new Technology record. The previous one was 20 feet 8 inches, made by J. Crane, Jr., '92. The summary of the six events was as follows:—

#### 120-YARD HURDLE.

- F. W. Lord, B. A. A. (4 yds.).
   F. McGrath, S. B. A. C. (scratch).
   G. C. Chaney, H. A. A. (6 yds.). Time, 18 seconds.

#### IOO-YARD DASH.

- J. G. Clark, H. A. A. (6 yds.).
   W. R. Mansfield, H. A. A. (4 yds).
   B. J. Wefers, B. C. A. A. (scratch). Time, 10 seconds.

#### 600-YARD RUN.

- T. E. Burke, B. A. A. (scratch).
   J. A. Stewart, St. M. A. C. (25 yds.).
- 3. G. Abbott, M. I T.
- Time, 1 minute 16 seconds.

#### 1000-YARD RUN.

- H. Cummings, Jr., M. I. T. (50 yds.).
   J. J. Purtell, Jr., E. H. S. Time, 2 minutes 20<sup>3</sup>/<sub>2</sub> seconds.

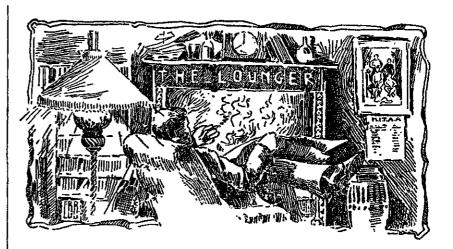
#### RUNNING HIGH JUMP.

- J. D. Dole, R. L. S. (3 in.), 5 ft. 9½ in.
   E. H. Clark, B. A. A. (1½ in.), 5 ft. 9¼ in.

#### RUNNING BROAD JUMP.

- F. L. Dunlap, H. A. A. (1½ ft.), 23 ft. 6 in.
   R. D. Farquhar, M. I. T. (1¾ ft.), 23 ft. 2¼ in.
   L. A. Carpenter (3 in.), 22 ft. 11¼ in.

At the Newton A. A. meet last Friday morning, A. V. Shaw, M. I. T., '96, won first in the pole vault with an actual height of 9 feet 6 inches.



THE Lounger sighs contentedly that a memorable Junior week is well over. Many return to the dull grind with a feeling of weariness, the Lounger trows, he has never seen that word in the third person before, but he rather likes the look of it,—in spite of the extra day vouchsafed by a considerate Faculty. Nevertheless the Lounger thanks their augustnesses for the favor, and gladly remarks their growing appreciation of Junior Week festivities. The Lounger's head still aches from the recital of the Eifersucht of the Cigale chez les Fourmis, his brain whirls dizzily before the succession of French and German plays, Tech Tea, Faculty Football, and all the rest, but he will endeavor to calm himself and lightly chronicle a few bits of the "Passing Show."

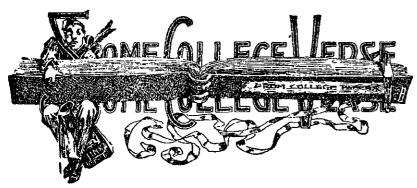
The sight of manly breasts decked with red, white, and black ribbon gave unmistakable evidence that the Germans were with us on Monday night. The arena for Technology histrionics festively draped in the German colors lacked but an imperial eagle to give the scene a truly German air, but the Lounger learns that the only bird procurable was of French extraction, and consequently ineligible. The Lounger's knowledge of German, like Mr. Grossmith's, is limited, but he doubts not that the quartet of actors uttered their lines in the purest Hanoverian. The fervor of Cäcilie's embraces nearly disconcerted some of the Lounger's sedate friends, while the desperate cries for "Milch!" which many took to be the German for beer, engendered a thirst in many a luckless man which even the proximity of the chapel could not assuage. This was, however, of slight moment, and was entirely offset by the delight at the graceful and noiseless capering of the "Institute Quartet," which confirms the Lounger's notion that our good people dearly love a ballet whether it masquerades as a Zwischenspiel or under another title. In the ensuing musical festivities the rotund jollity of a bluecoated student nearly eclipsed the beauties of "It hadn't ought to be," while the merry clink of beer mugs desperately waved aloft must have proved indeed tantalizing to the aforesaid unlubricated whistles. However, the last encore was finally sung, and the Lounger sauntered slowly home to dream of Heidelberg and Cäcilie.

It was with bright anticipatory eye that the Lounger greeted the hosts of pretty maids that courtesied so gracefully to the matrons of the Prom. The Prom maiden in all her glory is indeed a charming sight, and one calculated to make the hearts of brave Technology flutter, and no secluded coign was suffered to remain long vacant between the dances. Many were the wilted collars and weary feet ere the entrancing strains of the last waltz had died away, many the enthusiastic devotees of fair Terpsichore's art. 'Tis a long time indeed since the Lounger's manly arm has encircled so many fair waists - in the dance he means - in an equivalent space of time, and the Junior Prom. of Ninety-six will long linger in the Lounger's memory as a jolly dance where assembled so many fair Marions, sweet Mabels, and lovely Alices in a picture the like of which Pierce Hall seldom frames.

Scarcely had the Lounger recovered from the Prom. when he was called upon to do the honors at THE Verily was the office metamorphosed. The floor was scrubbed,—the Lounger sheds a silent tear at the irrestible march of progress,—the windows were polished resplendent, and the gas globes, which the Lounger had conscientiously believed to be of ground glass, were found to possess unsuspected qualities of transparence. The Lounger's corner was rudely despoiled of its venerable relics, the dignified editorial table was loaded with an unwonted burden of frappé and goodies, while plants, rugs, sofa cushions, and divans robbed the office of the last vestige of its identity, and certified that The Tech's "At Home" was in full swing. The Lounger regrets that his modesty prevented his introduction in his official capacity to the matrons, but he was there nevertheless, and dispensed The Tech's hospitality with a lavish hand. The pretty girls, the honored guests, and the jolly air of festivity will long make the Lounger cherish the memory of this altogether successful and, for THE TECH, novel function.

To a somewhat larger gathering than could be entertained in the not extensive apartments of THE TECH did the Glee and Banjo Clubs cater in the evening. The Lounger missed the tinsel eagle, but was consoled by the abundant bunting and mathematical arrangement of palms on the periphery of the stage, while a triple encore for the Banjo Club, the happy omission of Hannah and her consort, conspired to make the event successful and pleasing to the cultured audience. The Lounger would not omit commendation of the small boy who poses as imperial remover and replacer of chairs, nor of the careful manner in which refractory coat tails were successfully juggled; all of which points serve to render more complete the success which our justly celebrated organizations achieved, and assure promise of more triumphs in the future. Had it not been for the distracting presence of a fair siren who sat in front of him, the Lounger might have devoted more particular attention to the events of the programme. As it was, however, his attention was wandering, and were there any hidden excellencies which are yet unrevealed to him, he would receive their recital with true gratitude

It was at the French Plays that the Lounger experienced the keenest enjoyment, however. He has an extensive knowledge of the French language, acquired in his youth while working in a Paris-green factory, and not a syllable of the text was lost upon him. Though this year no exigency compelled a Co-ed to masquerade as a man in a girl's rôle, the circumstances were indeed harsh which compelled monsieur to bask in a green Freshman light. The necessary loss of certain hirsute appendages did much to transform him into a '98 Thespian, and as such he won much glory for the man whose understudy he was. The feminine grace displayed in the arrangement of that coiffure, and the matronly reticence of a Sophomore, together with a tumultuously exciting balletmonsieur and mademoiselle gracefully ensconsed in deep sight-form a combination indeed difficult to resist; so the Lounger gave up trying, and joined with his neighbors in voting the whole affair a "corker." The Lounger might suggest that next year the society employ for manipulating the calciums, a man with less pronounced Hibernian proclivities, for the murky green which so persistently shrouded the stage was far from artistic. Green is a pleasant color when rigidly confined to its proper sphere, but its lavish use at a function of the Junior Class may have conveyed a subtle innuendo which not all appreciated.



#### CHECKMATE.

Two games I played with lovely Bess, A game of love and a game of chess. In chess I was driven to the wall; In the game of love she gave me all; And when my men fell all ill-fated, 'Twas not my king alone was mated.

-Yale Record.

#### A TRIBUTE.

We honor our athletes, our scholars,
Our learned professors, at Yale,
But, Promenade maidens, your coming
Makes the glory of others grow pale.

We honor your loveliness wondrous,
Your bright eyes and beautiful hair,
Your bright faces, now red as the roses,
And now than the lilies more fair.

For your hearts light and merry, we love you, For your souls pure and free as the air, For the unconscious grace of your manner, For your sweetness beyond compare.

For a time—oh, so short!—you are with us, And then from old Yale you depart, But you stay, lovely Promenade maidens, In every true Yale man's heart.

-Yale Record.

SONG.

Italian.

Friends! let the brimming bowl go round, On with the merry dance and song; Let the piper pipe and the harp resound, For life's not long.

While the oil yet burns in the silver lamp Let us eat and drink right heartily; Soon in the cold earth dark and damp We shall silent lie.

Who knows what lies beyond death's flood?
Whether there be another shore?
Or whether a tavern on its bank
Shall welcome us evermore?

Friends! let the brimming bowl go round,
On with the merry dance and song;
Let the piper pipe and the harp resound,
For life's not long.

—Brunonian.

#### CHEER.

When the world's awry, when the tide is out, And the heart is dull the while, There's naught can dispel the care and doubt Like a girl's bright, fearless smile.

All the chilling mists of gloom and fear In a hard life's storm and whirl, Will vanish before the saucy cheer Of a sweet-faced, laughing girl.

There's new life in the air of her sunny smile,
Parting lips over lines of pearl;
And contagious hope in the dancing eyes
Of a blithesome, laughing girl.

Not snowflakes white, as they mantle down Soft and light o'er the scars of earth, Can as gently cover a vexed heart's frown As the spell of her cheery mirth.

All the weaker thoughts of a wayward heart Are folded away like a sail at furl; Or summoned to play the nobler part By the smile of a true, sweet girl.

-Brown Magazine.

#### THE VISION DANCE.

When evening comes with deepening shades that bring respite from toil,

The lads and lasses of the vale flock out in merry file; Adown the hawthorn lane they trip; their mirth the valley fills,

Till sportive echo wafts it off to wake the Galtee Hills.

For one short hour near that sweet bower

What would I not endure? My hope is still an eve to fill With dancing by the Suir.

Across the starry spangled sky slow steals the silvery moon;

The fiddler rasps his resined bow and plays a merry tune; "The Wind that Shakes the Barley," makes a fit strain for Irish feet,

When by "The Keelrow" followed fast we think the "set" complete.

The girls—the rogues!—in tiny brogues,
An anchorite would lure,
If haply he their charms might see
While dancing by the Suir.

Remembrance brings me many joys, but one I hold divine; It thrills my throbbing senses like deep draughts of mellow wine.

However dark the present care, one fancy makes it light: It is the glimpse I catch of home in visions of the night!

They never fail in calm or gale;
Those gleams all bliss secure,
That show to me in memory
Löved dancers by the Suir.

-The Owl.

#### NOYES BROTHERS



## Shirtings for Season 1895.

Madras, Cheviot, and Oxford Cloths, for the season of 1895, are now ready, and orders will be taken for Ladies' Shirts, Waists, Blouses, Jackets, Skirts, and Entire Suits, or sold by the yard, in dress patterns, if desired. Also for Children's Wear. For Men's and Youth's business, Negligee and Outing Shirts.

We invite an early inspection of the choicest goods we have ever shown.

Dress and Business Shirts from \$1.50, \$2.00, \$2.50 and up.

New Cravats 50c., 75c., \$1.00 and up.

White Duck Trousers \$1.75 to \$5.00 per pair.

Tennis and Yachting Suits, Blazers, Shirts, Trousers, Caps, and Belts, in stock or made to order from Flannels, Oxfords, Cheviots, Madras and Pure Silk Shirtings.

#### NOYES BROTHERS, Washington and Summer Sts., Boston, U. S. A.

L. E. FLETCHER & CO., HATTERS AND MEN'S OUTFITTERS.

#### HATS

In LEADING and CORRECT STYLES for YOUNG MEN.

Novelties in Neckwear,

Gloves, Hosiery, and Underwear,

158 BOYLSTON STREET,

Canes, Umbrellas, Etc.

Opp. COMMOK.

BOSTON.

PROFESSOR C. L. ADAMS'
PORTFOLIO OF

## HATTERS AND MEN'S OUTFITTERS. Letter · Drawing · Plates

can be obtained at our branch store,

Grundmann Studios, adjoining Architectural Building,

where we shall keep at all times a full line of

DRAFTING IMPLEMENTS,
Drawing and Blue Process Papers,
scales, triangles.
curves, t squares, etc.

Wadsworth, Howland & Co.,

INCORPORATED

82 and 84 Washington St., Boston. 267 State Street, Chicago.

SPECIAL RATES TO STUDENTS.

## NOTMAN PHOTOGRAPHIC COMPANY,

480 Boylston Street, and 3 Park Street.

PHOTOGRAPHERS TO M. I. T., '94.

Special Rates to Students.

#### LEADING OUTFITTERS\_

#### High Grade Mackintoshes

For the Principal Colleges in New England Regular Co-operative Discounts.

CLEVE & KRIM

49 Summer Street, Boston.

#### TECH STUDENTS

are cordially invited to inspect our work, which is the most artistic in the city.

Our place is a model of neatness, and we employ none but thoroughly competent men.

YOUR PATRONAGE IS RESPECTFULLY SOLICITED.

Copley Square Hotel Hair-Dressing Parlor.

Corner of Huntington Avenue and Exeter Street.

#### PARKER HOUSE

EUROPEAN PLAN.

CATERING FOR CLUBS AND DINNER PARTIES A SPECIALTY.

CUISINE UNEQUALED.

J. R. WHIPPLE & CO.

#### ST. BOTOLPH

NEW TECH. DORMITORY.

Favorably situated at the corner of St. Botolph and Harcourt Sts., near all the Departments of the Massachusetts Institute of Technology.

Furnished Suites

To let, including heat and baths.

Restaurant in Building.

M. DWYER, Manager.

For terms apply on the premises.

GODFREY MORSE, Proprietor.

#### Tech Boys.

Telephone, 239-4 Tremont

"Do You Know That"

#### SEVERY & YOUNG, Florists and Decorators,

288 Boylston Street, opposite Public Garden,

Supply choicest cut flowers at the most reasonable prices in town? They make a specialty of decorations for balls, parties and weddings. Lunch served from 11.30 A. M. till 3 P. M. All home cooking. The bill of fare is varied daily and the prices are moderate.

GENTS' FURNISHING DEPT. SWEATERS. SWEATERS.

ENGRAVING DEPT.

Pure Worsted. Finished Seams. All Colors. All Prices.

Engraved Plate and 50 Visiting Cards, ... Work Guaranteed...

Washington Street, Temple Place, West Street, Boston.

#### MEN'S DRESS SUITS.

Although it is well known among our Technology trade that we have always made a specialty of this branch of our business, we take pleasure in reminding their friends of the fact that we have the usual line of staples and novelties, and that we do not ask extravagant prices. We make only High-class Work, as our increasing patronage among Tech men will testify.

#### C. J. NICKERSON, Tailor and Importer,

#### 120 TREMONT STREET,

Cor. Hamilton Place, Phillips Building, Room 228.

The regular co-operative discount.

FORMERLY CUTTER FOR F. D. SOMERS.

#### ARCHITECTURAL PHOTOGRAPHS,

The Largest Collection in America.

All the best Public Buildings, Churches, Private Houses, and Business Blocks in Boston and New York.
Richardson's Works of Importance from all over New England. Also a complete line of

#### Art Photographs for Room Decoration.

STUDENTS WELCOME TO EXAMINE, WHETHER DESIRING TO FURCHASE OR NOT.

SOULE PHOTOGRAPH CO., Publishers, 338 Washington Street, Boston.

#### AT THE THEATRES.-Week beginning April 29th, '95.

Boston Museum.—Robert Mantell's second and last week. Monday and Tuesday, "Monbars;" Wednesday matinee, "The Marble Heart;" Wednesday evening and remainder of the week, "The Corsican Brothers." This is Mr. Mantell's first engagement at this house, and so far it has proven a most successful one.

Boston.—Sandow will follow the "Black Crook" at this house. He will be supported by a great vaudeville organization, including the famous "Tuafers," grotesques;



Tom Browne, the eminent double tone whistler, Billy Van, comedian, Mlle. Marguerite, Ben Dunham, Amama, Europe's greatest facial mimic, etc.

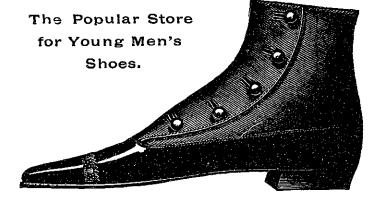
Park.—The great Boston favorite, Sadie Martinot, in her latest and most successful play, "The Passport." She is supported by a capital company and she has a part which fits her so admirably and which she plays in such a charming spirit that it has been one of the best road attractions.

Hollis Street.—Miss Ada Rehan in a grand repertoire. The news of Miss Rehan's engagement at this house will be hailed with delight by the large majority of Boston theatregoers. Her peculiar style of acting, which is most fascinating, draws one to her, and her engagement is sure to prove one of the most successful.

Castle Square.—"Rob Roy." The fifth week of the greatest comic opera success of the season. The strongest organization of comic opera ever seen in Boston. It is De Koven and Smith's latest and greatest work. Presented with full strength of the Whitney Opera Company.

#### COES & STODDER,

14 SCHOOL STREET.



A Discount of 10 per cent given to TECH Students.



Specialty: Dress Suits, Silk Lined, \$45.

#### F. C. CUMMINGS, Tailor,

No. 299 Washington Street, Boston, Mass.



OF ALL BAR SPRINGS THE FOUR-BAR IS THE BEST.

C. E. DAVIS,

#### Manufacturing and Prescription Optician,

No. 2 Park Square, Rooms 1 and 2, Boston.

MAKER OF THE FINEST CLASS OF PRESCRIPTION OPTICAL WORK AT A SAVING OF 75 PER CENT ON OLD PRICES.

SAMPLE PRICES: Compound Cylinders in Steel (best quality), \$2.50. Artificial Human Eyes, to Patient, \$4.00. Fifteen per cent special discount to students.

IMPORTER OF ARTIFICIAL EYES.

SELECTION PACKAGES FURNISHED.

## JAMES DELAY, FLORIST,

Decorator for Balls, Parties,
Receptions, Teas, and Concerts,

220 BOYLSTON STREET, BOSTON.

Branch Store,

Providence Station, Park Square.

#### We have a

Large' and Assorted Line of European and American Fabrics.

We ask an opportunity to show the same. We guarantee satisfaction both in fit and workmanship, and extend a cordial invitation to Tech Students to come and examine our goods and prices.

#### Hibbard-Mason Co.,

FINE....
TAILORING,

No. 515 Washington Street, Boston, Mass.

GEO. A. HIBBARD, Vice President.

Telephone 579.

#### HENRY S. LOMBARD, Manufacturer of

Established 1855.

#### Yachting Outfits of Every Description.

SPECIALTIES:

Duck Trousers, Outing Clothing, Sweaters.

46 to 52 Clinton Street, cor. Commercial Street, Boston, Mass.

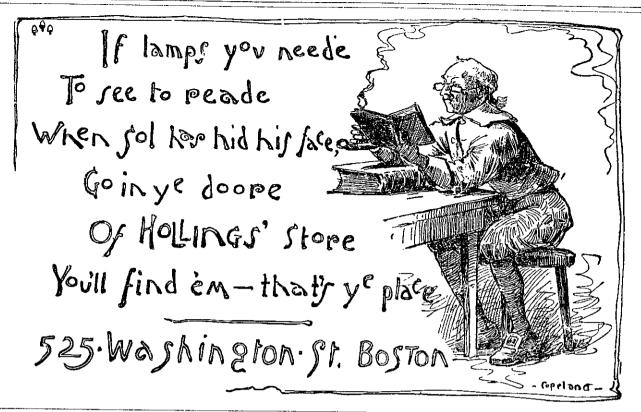
#### "The Yellow Fellow," STEARNS.

'PIERCE."

We carry a full line of BICYCLES at all prices. Call for our Catalogue.

"CZAR."

H. B. SHATTUCK & SON, 249 Columbus Ave., Boston.



Leading Dealers in ... .. ...

#### PHOTOGRAPHIC MATERIALS

Of every description. Discount to students.

··· B. FRENCH & COMPANY...

319 Washington Street, opp. Milk,

BOSTON, MASS



OF HAMILTON PLACE BOSTON.

## MEMBERS OF COURSE VI. Electrical Engineering.

Keep posted on current electrical affairs by subscribing for *The Electrical Engineer*, the oldest and best of all electrical periodicals.

THE ELECTRICAL ENGINEER,
No. 203 Broadway, New York.

We have a
Chiropodist at each
store to treat our
customers' Corns,
Bunions, and Ingrowing Nails,
FREE OF
CHARGE.



Call and examine our new Bicycle Shoe; it is the best thing to

PUSH IT
ALONG
WITH.

**BOSTON STORES:** 

Washington St., cor. Water.

635 Washington St., opposite Essex.

## F. L. DUNNE, TAILOR AND IMPORTER.

A SPECIALTY MADE OF

Suits for Riding, Shooting, and Golf.

Breeches for Riding, Hunting,
Racing, and Polo.

TRANSCRIPT BUILDING,

328 Washington Street, corner Milk, Boston.

#### COWLES ART SCHOOL,

145 Dartmouth Street.

Special attention given to Evening Classes for Tech Students in life and cast drawing.

Address --

F. M. COWLES, Agent.

Tuition, \$4.00 per Month.

Three Evenings per Week.

## THE BRUNSWICK

BOSTON.

Boylston and Glarendon Streets,
(Adjoining Copley Square)

Near the Museum of Fine Arts, New Public Library, New Old South Church, and opposite Trinity (Phillips Brooks') Church, and Institute of Technology.

## KEPT ON BOTH AMERICAN AND EUROPEAN PLANS.

BARNES & DUNKLEE, Proprietors. H. H. BARNES, Manager.



#### STUDENTS WILL FIND

BOSTON LINEN, BOSTON BOND and BUNKER HILL The nicest Stationery in existence.

They can obtain same in all the correct sizes, daintiest tints and atest finishes. We have over 250 varieties from which they can select.

Samuel Ward Company,

49 and 51 Franklin Street.

BOSTON.

TEXT-BOOKS, DRAWING MATERIALS, CORRESPONDENCE PAPERS, STUDENTS' SUPPLIES.

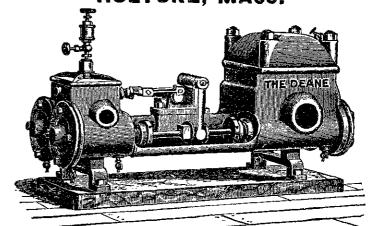
C. E. RIDLER,

BOYLSTON AND BERKELEY STREETS, BOSTON.

The M. I. T. Supply Store.

## DEANE STEAM PUMP CO.

HOLYOKE, MASS.



·STEAM·PUMPS

Boston Office: 54 Oliver Street.



## The Richmond Straight Cut No. 1 Cigarettes.

Cigarette Smokers who are willing to pay a little more than the price charged for the ordinary trade cigarettes, will find this brand superior to all others.

Cigarettes are made from the brightest, most delicately flavored, and highest cost Gold Leaf grown in Virginia. This is the Old and Original Brand of

Straight Cut Cigarettes, and was brought out by us in the year 1875.

Beware of imitations, and observe that the firm name as below is on every package.

#### ALLEN & GINTER.

AMERICAN TOBACCO SUCCESSOR.

Manufacturer.

RICHMOND, VIRGINIA.

KEEP'S SHIRTS. Our Celebrated "K" Quality Stock Shirts, open back or open front, or both, and with different sleeve lengths

> 85 cents each Unlaundered, \$1 each Laundered. Keep's \$1 Street Gloves are Famous.

KEEP MANFG. CO., 114 Tremont Street, Boston.

SCIPLIFIC BOOKS EDAMRELL & UPHAM,
The Old Corner Bookstore,
283 Washington St., Boston.

#### ALBERT BENARI. Tobacconist.

33 TREMONT STREET,

BOSTON, MASS.

Cigarettes, Tobacco, and Smokers' Articles. Agent for Hale's Smoking Mixture.

#### GEORGE H. GREENWOOD,

9 AND II BOYLSTON STREET.

Offers the largest stock of ...

#### **English and French Briar Pipes**

Ever shown in Boston, at very low prices.

## **CRAND HOTEL** Hair Dressing Parlors,

417 COLUMBUS AVENUE.

Hair Cutting in all the Latest Styles. Students' Work a Specialty.

T. F. NAGELS, Manager,

Formerly of Palmer House Shop, Chicago.

F. S. FROST.

H. A. LAWRENCE.

H. C. GARDNER

#### THE RIGHT PLACE TO BUY MATHEMATICAL INSTRUMENTS,

Colors, Drawing Papers, Blue Process Papers, T-Squares, Scales, Curves, Triangles, and all kinds of Architect's and Engineer's Supplies and

> Artists' **Materials** AND PICTURE FRAMES,

BOSTON. MASS.

NEW CATALOGUE FREE ON APPLICATION.

Importers, Wholesale and Retail Dealers.

GO WEST.
Cut Rates.
FOGG.
277 Washington Street, Boston.
Mileage—all routes.



Preparation for the

Established in 1826.

Massachusetts Institute of Technology.

THIS HAS LONG BEEN A SPECIALTY AT

#### CHAUNCY HALL SCHOOL.

EFFERENCE is made to the INSTITUTE FACULTY in regard to the thoroughness with which Chauncy-Hall pupils are fitted, not only for entering the Institute, but also for pursuing successfully their subsequent work. Preparation, also, for business and for college.

No. 893 Boylston Street, Boston.
(Very near the Institute.)

TIXE

# ElmerChickering

#### Leading Photographer

CERTAINLY has attained success. His success is proven by the number of patrons who daily visit the studio and take away with them the evidences of his skill and artistic ability. Before going elsewhere call at

21 WEST STREET.

BOSTON.

A. McMILLAN.

A. McMILLAN. Jr.

## A. McMILLAN & SON,

Tailors and Importers.

**W**E have removed to our new chambers ......

No. 127-A Tremont Street, opposite Park Street.

TELEPHONE, 3602.